



QUICK RESPONSE

*Saving life and property through effective licensing, plan review,
and inspection of fire protection systems.*

November 2006

Standpipes

Standpipe systems are installed in buildings to help firefighting personnel deploy attack hoselines quickly and with adequate water pressure and volume to attack a fire. Standpipe systems consist of a network of fixed piping and hose valve connections. Water is supplied either through an automatic water supply or manually through a fire department connection. **NFPA 14, *Standard for the Installation of Standpipe, Private Hydrant, and Hose Systems***, identifies five **types** of standpipes with three **classifications**. The five types of standpipes are:

- **Automatic-Wet** standpipe, filled with water at all times, is connected to a permanent water supply that is capable of meeting flow and pressure requirements.
- **Manual-Wet** standpipe, filled with water at all times, is connected to a water supply that is **not** capable of meeting flow and pressure requirements. The purpose of the water supply is to maintain water within the system, thus reducing the time it takes to get water to the hose station outlets. Manual-wet standpipe systems need water from a fire department pumper (or the like) to be pumped into the system in order to meet flow and pressure requirements.
- **Automatic-Dry** standpipe, filled with pressurized air, is connected to a permanent water supply that is capable of meeting flow and pressure requirements. It uses a device, such as a dry pipe valve, to admit water into the system piping automatically upon the opening of a hose valve.
- **Semi-automatic-Dry** standpipe, with empty pipe, is connected to a permanent water supply that is capable of meeting flow and pressure requirements. It uses a device, such as a deluge valve, to admit water into the system piping upon activation of a remote control device located at a hose connection. A remote control activation device shall be provided at each hose connection.
- **Manual-Dry** standpipe, with empty pipe, is **not** connected to a water supply. Manual-dry standpipe systems need water from a fire department pumper (or the like) to be pumped into the system in order to meet flow and pressure requirements.

Standpipe systems are classified by their usage: **Class I** for “heavy stream applications,” **Class II** as “first aid fire appliances”, and **Class III** which has the features of both **Class I** and **Class II**.

Class I – 2½” Hose Connection

For use by personnel trained and equipped for heavy stream applications.
Designed for 500 gpm for first standpipe and 250 gpm for each additional standpipe.
100 psi is required at the highest outlet.



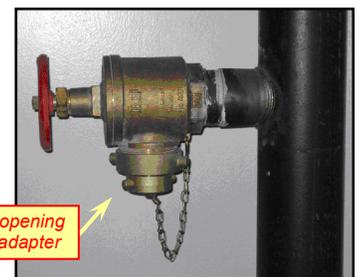
Class II – 1½” Hose Connection

For use as first aid fire appliances by building occupants and by firefighting forces for suppression or during mop-up.
Designed for 100 gpm at 65 psi outlet pressure.



Class III – 1½” & 2½” Hose Connections

Designed with features of both Class I and II systems



Note 2½” opening with 1½” adapter